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09/681,481	04/13/2001	Kun Zhang	GEMS8081.080	7331

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EXAMINER
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SURYAWANSHI, SURESH

ART UNIT	PAPER NUMBER
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2115

DATE MAILED: 06/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/681,481

Applicant(s)

ZHANG ET AL.

Examiner

Suresh K Suryawanshi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/26/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### **DETAILED ACTION**

1. Claims 1-34 are presented for examination.

#### ***Information Disclosure Statement***

2. The information disclosure statement filed on 5/18/2001 fails to comply with 37 CFR 1.98(a)(1), which requires a list of all patents, publications, or other information submitted for consideration by the Office. It has been placed in the application file, but the information referred to therein has not been considered. Submission of PTO-1449 is requested.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 8-9, 20, 22-26 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fenstermaker et al (US Patent no 6,490,684 B1) in view of Moeller et al (US Patent no 6,694,384 B1).

5. As per claim 1, Fenstermaker et al teach

receiving a request for activation of an inactive option in memory of a device located remotely from a centralized facility [col. 3, lines 27-34; col. 1, lines 37-42];

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if satisfied, generating an activation key configured to permit use of the inactive option upon installation in the device [col. 3, lines 34-37];

sending the activation key from the centralized facility to the device [col. 3, lines 34-37];  
and

automatically installing the activation key and enabling the inactive option upon initialization of the device [col. 3, lines 52-54; col. 4, lines 1-8].

Fenstermaker et al do not expressly disclose about determining whether to activate the inactive option in response to the electronic request based on whether a set of criteria has been satisfied. But it would have been so because the key is provided by the device vendor and the vendor will determine to provide or not an activation key based on requesting customer's information [col. 3, lines 26-31]. However, Moeller et al expressly disclose one such criteria where after payment, the user receives the activation key [col. 4, lines 40-45]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are directed to the problem of use of a feature in a device as needed by a user temporarily or permanently later on where device is in use. Thus, a vendor will make sure that the disabled feature of a device is not used for free or by an unauthorized user.

Fenstermaker et al do not expressly disclose if a criteria is unsatisfied, denying use of the inactive option. However, Moeller et al expressly disclose that the user receives an access key after payment [col. 4, lines 40-45]. Therefore, it would have been obvious to one of ordinary

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skill in the art at the time the invention was made to combine the cited references as both are directed to the problem of use of a feature in a device as needed by a user temporarily or permanently later on where device is in use. Thus, a vendor will make sure that the disabled feature of a device is not used for free or by an unauthorized user.

6. As per claim 2, Fenstermaker et al teach that wherein initialization of the device includes rebooting the device [col. 4, lines 1-8; powered-up].

7. As per claim 3, Fenstermaker et al teach that wherein the device includes a medical imaging scanner [col. 2, line 16; an ultrasound imaging system] and further includes the step of preventing activation of the inactive option during an imaging scan [col. 1, lines 37-40; the features are installed disabled].

8. As per claim 4, Fenstermaker et al teach that verifying activation of the inactive option [col. 3, lines 27-34]; and if verified, notifying a user of activation of the inactive option [col. 3, lines 34-37; key is generated which is the indication of activation of the inactive option].

9. As per claim 8, Fenstermaker et al teach

determining a host identifier [inherent to the system as to know about the remote computer/server; col. 3, lines 27-37];

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determining a system identifier [col. 3, lines 31-34; identifying the specific ultra-sound device];

identifying a modality [col. 3, lines 31-34; ultra-sound device]; and

identifying a use period including one of a trial use period, a limited use period, a pay-per use period, and an indefinite use period [col. 4, lines 16-20].

10. As per claim 9, Fenstemaker et al teach that sending the request electronically [col. 3, lines 31-37].

11. As per claim 20, Fenstemaker et al disclose the invention substantially. Fenstemaker et al do not expressly disclose about denying the request of the user in which the user is identified as having one of a delinquent account. However, Moeller et al expressly disclose about giving the access key or code after payment [col. 4, lines 40-45; after payment, the user receives an access key]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are directed to activate an inactive feature in a device. Moreover, activation method of Moeller et al will make sure that a user cannot use the device for free.

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12. As per claim 22, Fenstermaker et al teach

review, at a centralized facility, a request from a user to activate an inactive software application stored in memory of a medical imaging device located remotely from the centralized facility [col. 3, lines 27-37; col. 1, lines 37-42];

generate a software script designed to enable the software application [col. 3, lines 34-37; generating the key];

transmit the software script from the centralized facility to the device [col. 3, lines 34-37]; and

enable the software application only during a reboot of the device [col. 4, lines 1-8].

Fenstermaker et al do not expressly disclose about determining whether the user is qualified. However, Moeller et al expressly disclose to determine if the user is qualified to use the feature by looking user's payment status [col. 4, lines 40-45; after payment, the user receives an access key]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are directed to activate an inactive function in a device. Moreover, determination of a user qualification before providing the key to enable the feature will make sure that vendor has been paid for enabled feature or not an unauthorized user is using the feature.

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13. As per claim 23, Fenstemaker et al teach that wherein the sequence of instructions further causes the processor to notify the user upon enablement of the software application [col. 3, lines 34-37; key is generated which is the indication of activation of the inactive option].

14. As per claim 24, Fenstemaker et al teach that wherein a qualified user includes a user having a satisfactory billing account [col. 4, lines 40-45; after payment, the user receives an access key].

15. As per claim 25, Fenstemaker et al teach that wherein the software script is electronically transmitted via a private communication line [col. 3, lines 1-4, 34-37].

16. As per claim 26, Fenstemaker et al teach that wherein the software application is resident in memory of the medical imaging device [col. 1, lines 37-42].

17. As per claim 31, Fenstemaker et al disclose the invention substantially. Fenstemaker et al do not disclose about a qualified customer status including a satisfactory billing status.

However, Moeller et al clearly disclose providing the key upon a successful payment [col. 4, lines 40-45]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are directed to activate an inactive feature in a device. Moreover, a satisfactory billing status check will certainly reduce the risk of non-payment upon the use of the feature in the device.



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Fenstermaker et al and Moeller et al don not disclose about a compliant training status. However, it would have been in benefit of the user to know how to use the feature before using it and a vendor could provide such training. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make sure that the requester knows how to use the feature in the device before activating the temporary or time limited activation of the feature in the device.

18. Claims 5-7, 10 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fenstermaker et al (US Patent no 6,490,684 B1), Moeller et al (US Patent no 6,694,384 B1) and in view of Hube et al (US Patent no 5,442,541).

19. As per claim 5, Fenstermaker et al and Moeller et al teach the invention substantially. Fenstermaker et al and Moeller et al do not expressly disclose about prompting a user for an authorization to install the activation key and receiving the authorization from the user prior to installation of the activation key. But, a routineer in the art would do so to make sure not an unauthorized person is accessing the feature. However, Hube et al clearly disclose about a suitable log on procedure with an appropriate password [col. 15, lines 28-40]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as they are related to activate an inactive feature in a machine. Moreover, the technique of authorization of Hube et al will provide a good way to make sure not an unauthorized person is accessing the feature.

20. As per claim 6, Fenstemaker et al and Moeller et al teach the invention substantially. Fenstemaker et al and Moeller et al do not expressly disclose about accessing a graphical user interface to select the inactive option sought to activate and transmitting an option identifier to the centralized facility. However, Hube et al clearly disclose this [col. 15, lines 46-53; fig. 6; fig. 7; fig. 8]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as they are related to activate an inactive feature in a machine. Moreover, the technique of display and selection of feature in the machine taught by Hube et al will certainly make easier for a user to select an inactive feature in the machine as now there will be no mistake in communicating with the server about the required feature activation since user just has to select instead supplying all required parameters.

21. As per claim 7, Fenstemaker et al and Moeller et al clearly disclose electronically sending a system identifier to the centralized facility [Fenstemaker et al, col. 3, lines 31-37; Moeller et al, col. 4, lines 32-35]. Fenstemaker et al and Moeller et al do not expressly disclose about sending a user identifier to the centralized facility. But a routineer in the art would know that it is an essential part in the system where a feature is accessible upon a payment so payee would know that who had requested the feature. However, Hube et al clearly disclose about entering a particular machine identification and suitable log on procedure [col. 15, lines 28-32]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as they are directed to activate an inactive feature in a machine.

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22. As per claim 10, Fenstermaker et al and Moeller et al disclose determining if a user status includes one of a delinquent account [Moeller et al, col. 4, lines 40-45; after payment, the user receives an access key]. Fenstermaker et al and Moeller et al do not expressly disclose about receiving a user identification and validating it. However, Hube et al clearly disclose about a suitable log on procedure with an appropriate password [col. 15, lines 28-37]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as they are related to activate an inactive feature in a machine. Moreover, it is clearly beneficial to validate a user before enabling the inactive feature of a machine as to make sure that not an unauthorized person is accessing the feature.

23. As per claim 30, Fenstermaker et al disclose about a valid system identifier [col. 3, lines 31-34; information identifying the specific ultrasound device].

Fenstermaker et al do not clearly disclose about a qualified customer status. But it should have been there as the user requests to a remote source, the vendor of the device, for the key and the vendor would have verified the user's status before providing the key. However, Moeller et al clearly disclose that the user receives the key after payment meaning the status of the user is good [col. 4, lines 40-45]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are directed to activate an inactive function in a device. Moreover, a qualified customer status check will certainly reduce the risk of non-payment upon the use of the feature in the device.

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Fenstermaker et al and Moeller et al do not clearly disclose about a valid user identifier. But it should have been there as the user requests to a remote source, the vendor of the device, for the key and the vendor would have some sort of validation process. However, Hube et al clearly disclose a method of user validation [col. 15, lines 28-37; a suitable log on procedure with an appropriate password]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as they are related to activate an inactive feature in a device. Moreover, user validation will provide a good way to make sure that not an unauthorized user accesses the feature and the vendor can also keep track of a requester.

24. Claims 13, 18 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fenstermaker et al (US Patent no 6,490,684 B1) in view of Hube et al (US Patent no 5,442,541).

25. As per claim 13, Fenstermaker et al disclose the invention substantially. Fenstermaker et al do not expressly disclose about wherein the remote processor is further programmed to automatically initialize the at least one inactive software application upon an authorization of the user. However, Hube et al disclose about user log on and upon correct log on displaying the list of features that are not currently enabled in the machine, but user can enable it [col. 15, lines 28-53]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as both are directed to activate an inactive feature in a machine. Moreover, activating an inactive feature upon an authorization will insure that not an unauthorized person will access the feature.

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26. As per claim 18, Fenstemaker et al disclose the invention substantially. Fenstemaker et al do not expressly disclose about receiving a user identification and validating it. However, Hube et al clearly disclose about a suitable log on procedure with an appropriate password [col. 15, lines 28-37]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as they are related to activate an inactive feature in a machine. Moreover, it is clearly beneficial to validate a user before enabling the inactive feature of a machine as to make sure that not an unauthorized person is accessing the feature.

27. As per claim 33, Fenstemaker et al disclose the invention substantially. Fenstemaker et al do not expressly disclose about user authorization to enable the inactive application. But it would have been there as a user request to the vendor of the device for the key and the vendor should have some sort of method to keep track of a requester. However, Hube et al clearly disclose about a suitable log on procedure with an appropriate password [col. 15, lines 28-37]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references as they are related to activate an inactive feature in a device. Moreover, this way a vendor can keep track of a requester and make sure that not an unauthorized user is using the feature in the device.

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28. Claims 11-12, 14-17, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fenstermaker et al (US Patent no 6,490,684 B1).

29. As per claim 11, Fenstermaker et al teach

a computerized network [col. 1, line 15; network; col. 1, lines 40-42; locally or remotely; col. 3, lines 34-37; receiving the key over a network link];

a receiving center connected to the computerized network [col. 1, lines 40-42; locally or remotely; col. 3, lines 34-37; receiving the key over a network link];

a processing station located within the receiving center having a processor [col. 1, lines 27-37; key is generated by the remote source and to generate a key, some sort of processor will be required], wherein the processor is configured to:

receive a request from a user for activation of at least one inactive software application resident on the device [col. 3, lines 29-32];

generate an electronic enabler configured to activate the at least one inactive software application [col. 3, lines 34-37; key];

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transmit the electronic enabler from the receiving center to the device [col. 3, lines 34-37], wherein the device includes a remote processor programmed to:

control access to the at least one inactive software application [col. 27-37; feature to be enabled];

verify transmission of the electronic enabler [col. 3, lines 55-64; feature control manager verifies the received key];

if in an active status, prohibit enablement of the at least one inactive software application [col. 4, lines 1-8; as the feature does not get enabled until the system is rebooted]; and

if in an inactive status, enable the at least one inactive software application [col. 4, lines 1-8; as the feature only gets activated after powered-up again].

Fenstermaker et al do not disclose about determining a device operation status. However, a routineer in the art would know how to determine a device operation status as just by checking the status if the device is performing any one of functions in the device or running any application program or if the processor of the device is busy. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to determine a device operation status. Moreover, one would like to know a device operation status and make sure before rebooting it to activate an inactive function of the device let the device finish the current job.

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30. As per claim 12, Fenstemaker et al teach that wherein the remote processor is further programmed to automatically initialize the at least one inactive software application only upon reboot of the device [col. 4, lines 1-8; validation of every feature each time the ultrasound device is powered-up].

31. As per claim 14, Fenstemaker et al teach that wherein the remote processor is further programmed to schedule a software application initialization in response to instructions from the user [col. 4, lines 16-30].

32. As per claim 15, Fenstemaker et al teach that wherein the device includes a medical device [col. 1, lines 38-42; ultrasound device].

33. As per claim 16, Fenstemaker et al teach that wherein the medical device includes one of a cardiology device, a computed radiology device, a computed tomography device, a magnetic resonance imaging device, an x-ray device, an ultrasound device, a nuclear medicine device, and a positron emission tomography device [col. 1, lines 38-42; ultrasound device].

34. As per claim 17, Fenstemaker et al teach that wherein the electronic enabler is electronically transmitted via a private communication line [col. 3, lines 1-4, 34-37].

35. As per claim 19, Fenstemaker et al teach that wherein the electronic enabler is an alphanumeric software key [col. 3, lines 1-4].



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36. As per claim 21, Fenstemaker et al teach that wherein an active status includes a device in operation [inherent to the system as the device is in operation].

***Claim Rejections - 35 USC § 102***

37. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

38. Claim 27-29, 32 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Fenstemaker et al (US Patent no 6,490,684 B1).

39. As per claim 27, Fenstemaker et al teach

a centralized facility [col. 3, lines 27-37; remote source];

a medical imaging scanner remotely located from the centralized facility and capable of receiving transmissions from the centralized facility, wherein the medical imaging scanner includes a computer having one or more inactive applications resident in memory of the computer [col. 3, lines 27-34; a ultrasound imaging device]; and

a data script creator designed to generate a data script configured to enable a selected inactive application, wherein the data script is further configured to automatically enable the selected inactive application only upon initialization of the device [col. 3, lines 27-37; key to enable the selected inactive feature; col. 4, lines 1-8; feature is validated/enabled upon reboot].

40. As per claim 28, Fenstermaker et al teach that wherein the data script creator is further configured to generate a data script specific to at least one of a system identifier, an application identifier, a user identifier, and a host identifier [col. 3, lines 31-34].

41. As per claim 29, Fenstermaker et al teach wherein the centralized facility includes one or more computers configured to receive a request from a user remote from the centralized facility [col. 3, lines 27-31], wherein the one or more computers further includes a computer readable medium having thereon a set of instructions that when executed, causes the one or more computers to transmit the data script to the medical imaging scanner for automatic installation when the medical imaging scanner is inactive [col. 3, lines 34-37; key is transmitted to specific ultrasound device; col. 4, lines 1-8; as the feature only gets activated after powered-up again].

42. As per claim 32, Fenstermaker et al teach that wherein the data script is further configured to prevent enabling of the selected inactive application within the medical imaging scanner during device operation [col. 4, lines 1-8; as the feature does not get enabled until the system is rebooted].

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43. As per claim 34, Fenstermaker et al teach that wherein the one or more computers are further configured to verify a transmission of the data script and notify a user of the transmission [col. 3, lines 55-64; feature control manager verifies the received key].

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suresh K Suryawanshi whose telephone number is 703-305-3990. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 703-305-9717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sks  
June 22, 2004

THOMAS LEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

